

improved significantly in during follow up ( $P$  value  $<0.001$ ). The QRS duration with CRT was less but the change is not significant ( $P$  value = 0.1) suggesting that electrical resynchronization is not a prerequisite for clinical improvement in this cohort. Children including those with congenital heart disease patients who have evidence of dyssynchrony associated heart failure appear to benefit from cardiac resynchronization therapy on the mid-term. Selection criteria should include the use of new technologies to demonstrate mechanical dyssynchrony beside other conventional indications of CRT. Further studies looking at long-term benefits of CRT in pediatric and CHD patients are needed.

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### 61. The effect of depression on medication adherence in patients with heart failure

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Heart failure is a major and growing public health problem; approximately 5 million patients in the USA have heart failure. Depression is a serious mental illness that interferes with daily life activities and quality of life of Heart Failure Patients. Aim: To determine the association between depression and the medication adherence in patients with heart failure. Depression will reduce adherence to medication in patients with heart failure Quality project involving 50 patients with heart failure who have regular visits in Cardiovascular Disease Management Program in King Abdul-Aziz Cardiac Center. Two validated self-reporting tools; the Morisky Scale for Medication Adherence and the Patient Health Questionnaire (PHQ) for assessment of depression will be used. Multiple regression analysis with adjustment for covariates will be used to examine the relationship between depression and medication adherence. 66% of patients were male with mean age of  $62 \pm 11$  years, more than one third (36%) had depression at different level, 61% of subjects in this group showed low adherence rate compared to 6% amongst those who had no depression ( $p < 0.001$ ). Depression has a major impact on the medication adherence in patients with heart failure.

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### Heart Failure and Cardiomyopathies PACING AND OTHER THERAPEUTIC DEVICES

### 62. Gap in the application of implantable defibrillator and cardiac resynchronization therapy guidelines in heart failure patients

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**Background and objectives:** Literature review revealed no studies were done regarding the application of implantable defibrillator and cardiac resynchronization therapy guidelines in Saudi Arabia. Therefore, our aim was to identify the gap in the application of the guidelines for acute on chronic systolic heart failure patients in Saudi Arabia.

**Design and setting:** We used data from the heart function assessment registry trial in Saudi Arabia (HEARTS) to explore the rate of device implantation. In consecutive cohort admitted in 18 governmental hospitals with heart failure between October 2009 and December 2010.

**Results:** Of 1664 patients with acute on chronic systolic heart failure enrolled in the HEARTS registry, 227 (13.64%) have undergone a past ICD/CRT, 148 (8.9%) patients with ICD and 79 (4.7%) patients with CRT. 1437 (86.36%) patients did not go through an ICD or a CRT. From 71 VT/VF patients who are required to have an ICD only 10 (14%) patients received an ICD therapy. 223 patients have a left bundle branch block and 35 (15.6%) of those patients received an ICD/CRT device. From 831 patients with LVEF  $< 30\%$ , 170 (20.5%) went through a past ICD/CRT.

**Conclusion:** Since a large number of whom required an ICD/CRT did not receive a device, a gap in the application of ICD/CRT devices had been identified, further studies are required to establish the reason behind this.

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### Imaging

CATHETER-BASED CORONARY IMAGING AND HEMODYNAMICS

### 63. Clinical and angiographic profile of myocardial bridges in patients undergoing coronary angiogram for evaluation of chest pain

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A myocardial bridge is a band of heart muscle that lies on top of a coronary artery, instead of underneath it. First described by pathologists in the early 1920's, myocardial